

Remarks

This is in supplemental response to the Final Office Action mailed November 15, 2007 (Paper No./Mail Date 20071024) and follows Applicant's response filed January 22, 2008.

This also follows the Interview conducted February 13, 2008 with Examiners Marcela Cordero Garcia and Anish Gupta. Applicants note with appreciation the Examiners' courtesy and professionalism during the Interview and their willingness to advance the prosecution of the application.

As discussed at the Interview, the Examiners suggest that the word "solvated" better distinguishes certain aspects of the claimed invention. Claim 1 has accordingly been amended to recite that the solid phase resin is solvated. The description of solvated resin has been present in the application since its filing date; e.g. Paragraph 0012:

"Preparation of the solid phase support includes "solvating" it in an appropriate solvent (dimethyl formamide, or DMF, for example). The solid phase support tends to swell considerably in volume during solvation, which increases the surface area available to carry out peptide synthesis."

Accordingly, the adjective "solvated" avoids introducing any new matter.

As further discussed at the interview, Applicants submit herewith the declaration of co-inventor Dr. Michael J. Collins. As set forth therein, Dr. Collins confirms that conventional thinking avoided using microwaves for the deprotection step because of the tendency towards racemization and other unwanted reactions or byproducts.

Historically, microwaves have represented a relatively robust method of heating materials and the foundations of microwave assisted chemistry are in the areas of relatively aggressive drying and digestion techniques rather than sophisticated analytical and synthetic chemistry.

As objective evidence of the conventional thinking, two articles were discussed at the interview and are included as a part of Dr. Collins' declaration: Yeh, *Microwave-Enhanced Liquid-Phase Synthesis of Thiohydantoin and Thioxotetrahydropyrimidinones*, Molecular

Diversity, Vol. 7, pages 185-198 (2003); and Mergler, *The Aspartimide Problem in Fmoc-Based SPPS. Part I*, Journal of Peptide Science, Vol. 9, pages 36-46 (2003).

The Yeh article reports an unsuccessful attempt to use microwave deprotection following which the authors returned to a conventional room temperature deprotection step.

In the Mergler article, the authors likewise inform the skilled person that harsh cleavage methods enhance the risk of undesired byproducts and side reactions.

As set forth in the Interview Summary (Paper No. 20080213) the use of the word "solvated" overcomes the current § 102 rejection and the evidence from the relevant articles as supported and confirmed by Dr. Collins' declaration overcomes the § 103 rejection.

Applicants accordingly request favorable reconsideration of the now-pending claims at the earliest opportunity.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Philip Summa", with a long horizontal flourish extending to the right.

Philip Summa  
Reg. No. 31,573

021176  
Summa, Allan & Additon, P.A.  
11610 North Community House Road  
Suite 200  
Charlotte, NC 28277  
Telephone: (704) 945-6701  
Facsimile: (704) 945-6735